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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**

☒ Declaration Submitted with Initial Filing      OR      ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number

BP 2003

First Named Inventor

Nabil R. Yousef

**COMPLETE IF KNOWN**

Application Number

Filing Date

Art Unit

Examiner Name

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**CHANNEL ESTIMATION AND/OR EQUALIZATION USING REPEATED ADAPTATION**

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

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**DECLARATION — Utility or Design Patent Application**Direct all correspondence to: ☐Customer Number  
or Bar Code LabelOR ☒

Correspondence address below

Shayne X. Short, Ph.D.

Name

Garlick Harrison & Markison, LLP  
P.O. Box 160727

Address

City Austin

State Texas

ZIP 78716-0727

Country US

Telephone (512) 825-1145

Fax 1: (512) 394-0054  
Fax 2: (512) 264-3735

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR :

☐ A petition has been filed for this unsigned inventor

Given Name

Nabil R.

Family Name  
or Surname

Yousef

(first and middle [if any])

Inventor's  
Signature

Date 2/18/02

Residence: City Foothill Ranch

State CA

Country US

Citizenship Egypt

Mailing Address 95 Anacapa Ct.

City Foothill Ranch

State CA

ZIP 92610

Country US

NAME OF SECOND INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name

(first and middle [if any])

Family Name  
or SurnameInventor's  
Signature

Date

Residence: City

State

Country

Citizenship

Mailing Address

City

State

ZIP

Country

☐ Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

## POWER OF ATTORNEY FROM ASSIGNEE

**Broadcom Corporation**, a California corporation having a principal place of business at 16215 Alton Parkway, Irvine, California 92618-7013, is assignee of the entire right, title and interest for the United States of America (as defined in 35 U.S.C. § 100), by reason of an Assignment to the Assignee executed on \_\_\_\_\_ of an invention known as **CHANNEL ESTIMATION AND/OR EQUALIZATION USING REPEATED ADAPTATION** (Attorney Docket No. BP 2003), which is disclosed and claimed in a patent application of the same title by the inventor(s) **Nabil R. Yousef** (said application filed on \_\_\_\_\_ at the U.S. Patent and Trademark Office, having Application Number \_\_\_\_\_).

The Assignee hereby appoints the U.S. attorneys associated with **Garlick Harrison & Markison, LLP** to prosecute this application and any continuation, divisional, continuation-in-part, or reissue application thereof, and to transact all business in the U.S. Patent and Trademark Office connected therewith, such attorneys currently being:

Bruce E. Garlick	Reg. No. 36,520
James A. Harrison	Reg. No. 40,401
Timothy W. Markison	Reg. No. 33,534
Shayne X. Short, Ph.D.	Reg. No. 45,105
Robert C. Strawbrich	Reg. No. 36,692

The Assignee hereby grants said attorneys the power to insert on this Power of Attorney any further identification that may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

Send correspondence to: Shayne X. Short, Ph.D.  
GARLICK HARRISON & MARKISON, L.L.P.  
P.O. Box 160727  
AUSTIN, TEXAS 78716-0727.

Direct phone calls to Shayne X. Short, Ph.D. at (512) 825-1145.

FOR: Broadcom Corporation

SIGNATURE: \_\_\_\_\_

BY: William J. Ruehle

TITLE: Vice President and Chief Financial Officer (VP & CFO)

DATE: February 12, 2002

Certificate Under 37 C.F.R. § 3.73(b)Applicants: **Nabil R. Yousef**Application No.: Not yet assigned

Filing Date: \_\_\_\_\_

Entitled: **CHANNEL ESTIMATION AND/OR EQUALIZATION USING REPEATED ADAPTATION**Attorney Docket No: **BP 2003****Broadcom Corporation****, a California Corporation**

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership,  
university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest, or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above.  
The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:** A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

FOR: Broadcom Corporation

SIGNATURE: \_\_\_\_\_

BY: William J. RuehleTITLE: Vice President and Chief Financial Officer (VP & CFO)DATE: February 12, 2002